



सत्यमेव जयते

Ministry of Environment & Forests (MOEF)

No.J-11015/328/2008-IA.II(M)

Paryavaran Bhawan,
C.G.O.Complex,
New Delhi -110510.

Dated: 5th March 2010

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C.G.M (CRP)
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To
M/s Singareni Collieries Company Ltd.,
Kothagudam Collieries – 507 101,
Bhadrachalam Road Railway Station,
Khammam District, A.P.

Sub: Konderpuram Underground Coal Mine Project (0.51 MTPA with a peak production of 0.54 MTPA) of M/s Singareni Collieries Company Ltd., located in village Ramanujavaram, Mandal Manuguru, District Khammam, Andhra Pradesh- environmental clearance – reg.

Sir,

This is with reference to letter No. CRP/ENV/A/425/481 dated 30.07.2008 for Terms of Reference, which was granted vide MOEF letter dated 19.09.2008 and with reference to application for environmental clearance based on the prescribed Terms of Reference vide letter No. CRP/ENV/A/425/528 dated 31.08.2008 and letters dated 02.01.2009 and 08.02.2010 on the above-mentioned subject. The Ministry of Environment & Forests has considered the application. It has been noted that the project **is for opening a new Underground Coal Mine Expansion Project with a peak production of 0.51 million tonnes per annum (MTPA) of coal with a peak production of 0.54 MTPA. The entire ML area of 477.03 ha** is forestland, which forms a part of Aswaram and Bayyaram RF. Forestry clearance is being applied for diversion of 203.47 ha of forestland of which 5.86 ha is for surface structures only. The ML falls within 5km of the Kinnerasani WL Sanctuary. A number of Schedule-I and II fauna such as Bear, Spotted deer, Sambar Deer are found in the study area. The lease is drained by Mallapalli Vagu, which is proposed to be diverted.

Mining is by underground method and is semi-mechanised involving sand stowing. Mineral transportation of 1800 TPD of coal from the mine is by road and covering a road length of 6 km. Ultimate working depth of the mine is 243m below ground level (bgl). Water table of the study area is in the range of 0.80-13.30m bgl during the pre-monsoon and in the range of 0.10-7.65m bgl during post-monsoon period. Peak water requirement of 77 m3/d is met from mine pit water. Approval of the State Groundwater Department is obtained. No R&R is involved. Life of the mine is 21 years. Public Hearing was held on 18.05.2009. Mining Plan has been approved on 29.07.2009. Capital cost of the project is Rs. 19.29 crores.

2. The Ministry of Environment & Forests hereby accords environmental clearance to the above-mentioned **Konderpuram Underground Coal Mine Project of M/s Singareni Collieries Company Ltd. for a peak production of coal at 0.51 MTPA with a peak production of 0.54 MTPA in a total lease area of 477.03 ha** under the provisions of the Environmental Impact Assessment Notification, 2006 and subsequent amendments thereto and under Para 2.1.1 of MOEF Circular dated 13.10.2006 subject to the compliance of the terms and conditions mentioned below:



A. Specific Conditions

- (i) Mining shall not be undertaken until the approval of the Standing Committee on Wildlife is obtained since the proposed mine is within 5km distance from Kinnersani WL Sanctuary.
- (ii) Mining shall not be undertaken until forestry clearance has been obtained under the provisions of FC Act, 1980.
- (iii) Sufficient coal pillars shall be left unextracted around the airshaft (within the subsidence influence area) to protect from any damage from subsidence, if any.
- (iv) Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the roads.
- (v) Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.
- (vi) While extracting panels in the lower seam, all water bodies in the low-lying/subsidence area shall be drained. Dewatering of the old goaves of the upper seam shall be continued as long as the lower seam is worked to prevent accumulation of large water bodies over working area.
- (vii) Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads, and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement, appropriate effective corrective measures should be taken to avoid loss of life and material. Cracks should be effectively plugged with ballast and clayey soil/suitable material.
- (viii) Garland/surface drains (size, gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity should be designed keeping 50% safety margin over an above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity should also provided adequate retention period to allow proper settling of silt material. Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rainfall.
- (ix) Crushers at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.
- (x) Drills should be wet operated.
- (xi) Mineral transportation shall be using a minimum 20-T capacity trucks.
- (xii) A progressive afforestation plan shall be prepared and implanted for the undisturbed area and shall include area brought under green belt development, areas along roads, infrastructure, over surface acquired below which mining is being done, along ML boundary, township outside the lease area, etc, by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.
- (xiii) A Conservation Plan for Schedule-I and II species found in and around the project area shall be formulated in consultation with the State Forest and Wildlife Departments and implemented with funds (capital and revenue) for various activities thereunder and a report shall be regularly submitted to the MOEF RO, Bangalore
- (xiv) Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity

should be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected should be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.

- (xv) The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- (xvi) Sewage treatment plant should be installed in colony. ETP should also be provided for workshop and CHP wastewater.
- (xvii) Activities undertaken CSR along with costs thereon shall be regularly uploaded on the company's website.
- (xviii) For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bangalore.
- (xix) A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.

B. General Conditions

- (i) No change in technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.
- (ii) No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.
- (iii) Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in SPM and RSPM etc. shall be carried out at least once in six months.
- (iv) Data on ambient air quality (PM10, PM2.5, SO2 and NOx and heavy metals such as Hg, As, Ni, Cr, etc) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bangalore and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognised under the EP Rules, 1986 shall be furnished as part of the compliance report.
- (v) Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.
- (vi) Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.

- (vii) Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the mineral shall be covered with tarpaulins and optimally loaded.
- (viii) Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognised under EP Rules, 1986.
- (ix) Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.
Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.
- (x) A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.
- (xi) The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bangalore.
- (xii) The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry of Environment & Forests at <http://envfor.nic.in>
- (xiii) A copy of the environmental clearance letter shall be marked to concerned Panchayat/Zila Parishad, Municipal Corporation or Urban Local Body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.
- (xiv) A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.
- (xv) The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in the public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as SPM, RPM, SO₂ and NO_x (ambient and stack if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.
- (xvi) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and the SPCB.
- (xvii) The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.
- (xviii) The environmental statement for each financial year ending 31st March in Form-V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of

compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.

3. The Ministry or any other competent authority may stipulate any further condition for environmental protection.

4. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.

5. The above conditions will be enforced *inter-alia*, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules. The proponent shall ensure to undertake and provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.


(Dr.T.Chandini)
Director

Copy to:

1. DG (F) and Special Secretary, MOEF, New Delhi with reference to Specific Condition No. (i), (ii) and (xiii).
2. Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
3. Secretary, Department of Environment & Forests, Government of Andhra Pradesh, Secretariat, Hyderabad.
4. Chief Conservator of Forests, Regional office (SZ), Ministry of Environment & Forests, 4th Floor, F-Wing, Kendriya Sadan Block, Kormangala, Bangalore – 560034.
5. Chief Wildlife Warden, Government of Andhra Pradesh, Secretariat, Hyderabad.
6. Principal Chief Conservator of Forests, Government of Andhra Pradesh, Secretariat, Hyderabad.
7. Chairman, Andhra Pradesh State Pollution Control Board, Paryavaran Bhawan, A-3 Industrial Estate, Sanatnagar, Hyderabad – 500038.
8. Chairman, Central Pollution Control Board, CBD-cum-Office Complex, East Arjun Nagar, New Delhi -110032.
9. Member-Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
10. District Collector, Khammam, Government of Andhra Pradesh.
11. Monitoring File 12. Guard File 13. Record File